

## REMARKS

In the Office Action, claims 9-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Labino et al. (Labino).

Reconsideration is requested.

The Labino patent discloses a fibrous glass composition which has ingredients that overlap the ingredients of claims 9-11 (col. 4, lines 16-20) but is in a different physical form. The Labino patent teaches that the disclosed fibrous glass contains 0-10% of  $B_2O_3$  but all of the Labino Examples contain 2.2% or more of  $B_2O_3$  with the preferred range being 2-4% of  $B_2O_3$ . In addition there is no evidence in Labino that a composition which does not contain  $B_2O_3$  can be glassified. Labino shows that it is necessary to add at least 2% of  $B_2O_3$  in order to produce a fine fiber at a temperature of 1700°F - 1800°F (927°C-982°C). This is a teaching that one should always use at least 2% of  $B_2O_3$  to obtain the fibrous glass of Labino.

The glass of the present invention, as defined by the amended claims, has from 0-1.7% of  $B_2O_3$ . The restriction of this component to this range prevents deterioration of the chemical properties of the glass and also maintains good uniformity of the refractive index. A uniform refractive index is the most important property for a glass that is used for an i-line stepper. The amended claims point out the use of  $B_2O_3$  at a level of 0-1.7% which distinguishes the claimed glass from the Labino glass. In addition, Labino contains no description of the use of  $As_2O_3$ ,  $TiO_2$  and F for preventing the compaction phenomenon in glass. For these reasons, it is requested that this ground of rejection be withdrawn.

Claim 13 was rejected under 35 U.S.C. §103(a) as being unpatentable over Labino in view of Volf.

Reconsideration is requested.


The Labino patent has been distinguished above from the claimed invention. This reference does not suggest that  $As_2O_3$  and F contribute to the prevention of the compaction phenomenon. In addition, Volf is silent about the use of  $TiO_2$ . Thus, from the description of Volf, it would be impossible for one skilled in the art to predict what range of  $As_2O_3$  and F would be effective for prevention of the compaction phenomenon. For

these reasons, the glass defined by claim 13 is not made obvious by the combination of Labino and Volf and it is requested that this ground of rejection be withdrawn.

The Examiner is thanked for the allowance of claim 14. This claim has been amended to change the range of the amount of  $\text{Na}_2\text{O}$  from 10.9 to 5mass% to correspond to the original claim language. The claim was inadvertently amended to change 5 to 10.9mass % and this revision has no effect on the patentability of the claim.

An early and favorable action is earnestly solicited.

Respectfully submitted,



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